

S/191/61/000/004/009/009

B110/B208

All-Union Conference on the production...

furan series. V. I. Itinskiy (NIIPM) reported on physicochemical processes taking place in the manufacture of plastics and plastic concrete. Considerable interest was raised by a lecture of S. S. Davydov, Vice-President of the Academy of Building and Architecture USSR, on "Reinforced plastic concrete and its prospects". N. A. Moshchanskiy (Institut betona i zhelezobetona) (Institute of Concrete and Reinforced Concrete) presented data characterizing plastic concrete as a material resistant to aggressive media used in chemical engineering. A. A. Sapunov (Academy of Building and Architecture USSR) reported on the use of plastic concrete for underground buildings. The director of the Ferganskiy gidrolyznyy zavod (Fergana Hydrolytic Factory), I. K. Cherenukhin, spoke on the improvement of the manufacture of the FA (FA) monomer. I. M. Yelshin stressed the economic usefulness of producing wear-resistant coatings in hydraulic engineering. Plastic concrete coatings laid in 1959 at two waterfalls in the Uzbekskaya SSR showed unchanged hydrotechnical properties after the floods of 1960. N. N. Oster-Volkov (NIIPM) reported on the success achieved in the application of plastic concrete for the protection of hydrolytic apparatus from corrosion. Research work done from 1959-1960 by SOYUZDORNII and the dorozhnnyy institut (Institute of Road Building) of

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S/191/61/000/008/002/006
B110/B20115-8130

AUTHORS:

Kamenskiy, I. V., Itinskiy, V. I., Teplov, N. Ye.
Andrianov, B. V.

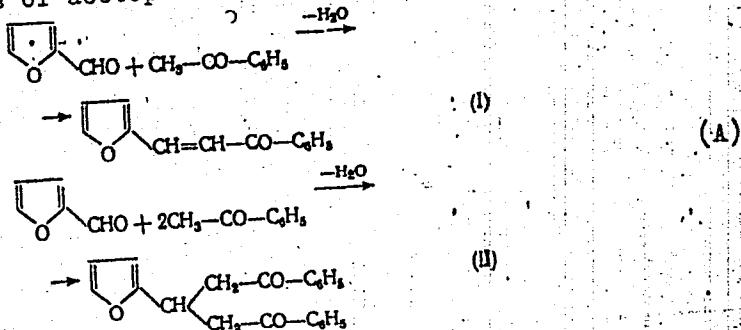
TITLE:

Synthesis and study of monomeric and polymeric reaction
products of acetophenone with furfurole

PERIODICAL:

Plasticheskiye massy, no. 8, 1961, 12 - 15

TEXT: Reaction products of acetophenone with furfurole are as follows:



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Synthesis and study of monomeric...

(II) is obtained with considerable excess of acetophenone only. (I) is prepared by condensation of equimolecular amounts of furfurole and acetophenone by means of sodium ethylate in alcohol in a yield of 60 - 80 %. In consideration of the fact that the production of resins by means of benzene sulfonic acid catalysts and resulting resin products had been hitherto insufficiently described, their description was the aim of the present work. The authors used (1) furfurole, (2) acetophenone. The polymers were obtained (I) directly from the reaction mass without separation from monofurfurylidene acetophenone (MFAP), (II) by way of resinification of MFAP. The product produced by Harvey's method (Ref. 8: USA Patent 2,461,510 (1949)) loses fluidity on the passage to the B stage. Hardening takes place at 250°C during 30 minutes with the separation of 50 % of volatile parts. The authors washed the reaction mass with cold water, dried it at 100°C, and 15 mm Hg during 3 hr, thus obtaining a brown oily liquid. A vacuum distillation yielded: 14 % furfurole, 16 % acetophenone, 60 % MFAP, 10 % resin. After 3.5 hr of heating at 250°C a fusible black resin (dropping point 65°C) was obtained. On addition of 5 % benzene sulfonic acid (50 % acetone solution) the resin is hardened during 19 minutes at 250°C under separation of 40 % of volatile parts and

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Synthesis and study of monomeric...

formation of foaming products. Table 1 shows that in MFAP production under optimum, equimolecular conditions, a temperature drop (experiments 1 - 5) reduces the resin formation and at the same time retards the MFAP formation. An increase of the catalyst amount (experiments 4,6,7,9-12), and a concentration increase of its aqueous solution (experiments 10 - 11), however, speed it up. At room temperature (experiments 8 - 12), MFAP is obtained without resin. 20 g KOH in 20 g H₂O were added by drops to 96 g furfurole and 120 g acetophenone within 20 - 30 minutes, neutralized with 0.5 N HCl, washed with H₂O until Cl⁻ ions were removed completely, and dried in vacuum. MFAP is bright-yellow, fine-crystalline with the melting point 41.8°C, and 89 % of the theoretical yield, soluble in all organic solvents (to 12 % in petroleum ether). Its specific gravity was 1.1120, the boiling point 186°C at 11 mm Hg, 181°C at 9 mm Hg. The molecular weight, cryoscopically determined in dioxan was 196.8, the oxime number was 560, since benzylidene acetophenone compounds add two hydroxyl amine molecules. Resinification took place (I) thermally, (II) in the presence of a catalyst. According to Table 3, resinification takes place at high temperatures (250°C) with 95 - 97 % yield. Since benzene sulfonic acid (BSA) and H₂SO₄

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(Table 4) dissolve in the monomer, the latter was heated to 60° C in a three-necked flask, and 1 - 5 % catalyst was added under vigorous stirring. The resin obtained in a yield of 98 % was brittle at room temperature. 0.25 M (49.5 g) monomer in 100 ml toluene yielded with 5 % BSA (referred to the monomer) a viscous, rubber-like mass which gradually hardened to a non-melting, unsoluble polymer. All resins were black, with a shining surface, and a specific gravity of 1.1 - 1.5. The dropping point of the resin

obtained without BSA was 71°C; that of resin prepared with 1 % BSA was 78°C. The resins were found to be well soluble in benzene, its derivatives, dioxan, chlorohydrocarbon, various ketones (cyclohexanone), scarcely in alcohols and ethers. Fractionating allowed recognizing a polydisperse character. Four fractions were separated from a 10 % acetone solution: (1) insoluble residue, (2) and (3) were separated by addition of 10 ml H₂O to a 100 ml solution, (4) by means of 1000 ml H₂O. Infrared spectra for resins produced without (I) and with (II) catalyst yielded CO bands

(1685 - 1665 cm⁻¹) and double bond bands (1647 - 1621 cm⁻¹) in the conjugate -C=C-O-system. The double bond peaks were, however, found to be weaker particularly with (I). The peak of ethylene bond(1285 - 1310 cm⁻¹) exists only with monomer and (II). The absorption band of the furan ring

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(1131 - 1189 cm⁻¹) is weaker with (I) and (II) than with the monomer. The peaks of the benzene nucleus (1110 - 1070 cm⁻¹) appear in the three spectra, whereas the furan ring-bound in α , α' -position (1378 cm⁻¹) was found only with (I) and (II). There are 1 figure, 5 tables, and 15 references: 6 Soviet-bloc and 9 non-Soviet-bloc. The references to English-language publications read as follows: Ref. 7: US Patent 2,461,508 (1949); Ref. 8: US Patent 2,461,510 (1949); Ref. 9: US Patent 2,768,408 (1956)

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S/191/61/000/010/003/008

B101/B110

AUTHORS: Kamenskiy, I. V., Peshekhonova, A. L., Itinskiy, V. I.

TITLE: Furfural- and hexamethylentetramine-base resins

PERIODICAL: Plasticheskiye massy, no. 10, 1961, 15-19

TEXT: A short review of different methods for obtaining furfural resins and a report on the production of resins from commercial furfural (boiling point, 158-162°C, d_{20}^{20} = 1.1514, h_D^{20} = 1.5280) and hexamethylenetetramine (purity, 98.5 %) are given. At a ratio of 3-8 moles of furfurol per mole of hexamethylentetramine, a fusible and soluble resin forms within 5-12 hr, according to the ratio. It becomes infusible and insoluble at temperatures $\geq 250^\circ\text{C}$ within 3-3.5 min. The optimum ratio with 100 % yield is 6 : 1. This polymer is termed $\delta\Gamma-1$ (FG-1) resin (molecular weight, 350; hardening within 2 min at 250°C). Moreover, another resinous product (95 % yield) was synthetized at a ratio of 15 : 1 (viscosity: 40-45 sec in the 83-4 (VZ-4) viscosimeter). On thermal treatment, the volatile products are distilled off, and a hard, brittle, *✓*

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Furfural- and hexamethylenetetramine-base...

black resin is obtained, which dissolves readily in acetone, partially in alcohol, and is insoluble in water. Further heating makes it insoluble and infusible. This product is termed FG-2 (molecular weight, 452; hardening within 4 min at 250°C). Solvents for both resins are: acetone, furfural, ethyl cellosolol, furyl alcohol, dioxane and acetic acid. Residual hexamethylenetetramine was with water, residual furfural with petroleum ether. They were dried, purified with ethyl alcohol, extracted in acetone, dissolved in dioxane and precipitated with water. The following fractions were obtained by successive dissolution in ethanol, acetone, and dioxane and precipitating with water:

| solvent | percentage of the fraction | |
|----------------------|----------------------------|---------|
| | in FG-1 | in FG-2 |
| ethanol | 24.20 | 10.55 |
| acetone | 36.50 | 51.70 |
| acetone (fraction 3) | - | 18.30 |
| dioxane | 28.40 | 17.40 |
| dioxane (fraction 4) | 9.15 | - |

Molding powder was produced from FG-2. Kaolin impregnated with a 50 %

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Furfural- and hexamethylenetetramine-base...

solution of FG-2 in acetone served as filler. The heat resistance was determined by means of S. N. Zhurkov's device (Trudy I i II konferentsii VMS (Papers of the First and the Second Conference on High-molecular Compounds), Izd. AN SSSR, 1945). Optimum method: Heating of the molding powder at 120°C for 2.5 hr; tabletting under 1250 kg/cm²; before pressing, heating at 200°C (1-2 min per mm of tablet thickness), pressing at 300°C and 250-300 kg/cm². A heat resistance of up to 400°C (0.055 % deformation) has been found. FG-2 plastics are stable in 40 % NaOH, 50 % H₂SO₄, but are destroyed by 58 % HNO₃. The water absorption was 0.65 % in cold water (24 hr), and 0.432 % in boiling water (30 min). Glass-reinforced CФГ-2 (SFG-2) plastics were made with T-90 π/3 (T-90 p/z) glass fabric containing 2.5 % paraffin lubricant. Glass fabric was impregnated with a 45 % FG-2 solution in acetone, and dried for 24 hr at room temperature. Then, it was heated at 120°C for 2.5 hr, and pressed at 300°C and 10₂ kg/cm². The impact strength of the glass-reinforced plastic was 260 kg·cm/cm², and the static bending strength was 2073-2380 kg/cm². Combination with epoxy resins is recommended to prevent the lamination observed. The dielectric constant of SFG-2 was 4.9-5.2 between 20 and 300°C. As compared with

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Furfural- and hexamethylenetetramine-base...

bakelite powder, the use of FG-2 as a binding agent for quartz sand in the manufacture of molds for precision casting resulted in a reduced separation of gas (11.4 cm³). Hu Lan-chieh assisted in the experiments. There are 4 figures, 6 tables, and 17 references: 4 Soviet and 13 non-Soviet. The two most recent references to English-language publications read as follows: G. Mains, M. Phillips, Chem. Met. Eng., 24, 661 (1921); US Patent 1909784.

Card 4/4

ITINSKIY, V.I.

Plastic concrete and reinforced plastic concrete in agriculture.
Plast.massy no.11:72 '61.

(MIRA 14:10)

(Plastic) (Concrete) (Farms--Equipment and supplies)

KAMENSKIY, I.V.; ITINSKIY, V.I.; KUZNETSOV, A.N.

Polymers on the basis of condensation products of furfurole
with acetone. Copolymers of difurfurylidereacetone with methyl
methacrylate and styrene. Plast. massy no.12;21-22 '62.
(MIRA 16:1)
(Pentadienone) (Methacrylic acid) (Styrene)

KAMENSKIY, I.V.; VOROB'IEV, B.P.; ITINSKIY, V.I.; OSTER-VOLKOV, N.N.

Polymers based on the condensation products of furfural
with acetone. Plastic materials based on difurfurylideneacetone. Plast. massy no.3:17-19 '63. (MIRA 16:4)

(Plastics) (Butenone)

1. Author's name: Itinskij, V. I. Volkov, N. N. Kargin, S. I.
2. Date of application: 1965/06/19

S/0286/65/000/005/0069/0069

20

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3. Title: A method for producing plastics. Class 39, No. 168870.

4. Place of application: Byulleten' otechestvennykh tovarnykh znakov, no. 5, 1965, 69

5. Type of patent: Plastic. Right. 168870

6. Description: This Author certificate presents a method for producing plastics from synthetic resins, mineral fillers, and mineral fillers. In order to increase the mechanical properties of the plastic, the mineral filler is treated

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ordinary methods.

ASSOCIATION: none

SUBMITTED: 28 Jun 56

EXCL: 00

SUB CODE: 10

SC SEP REV: 000

OTHER: 000

Card

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000618920007-8"

Kamenakiy, L. P.; Itinskiy, T. A.; Shavetkiy, V. S.

1936] *Some New Compounds from furfuryl alcohol*. (Part V.) 1049

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000618920007-8"

SOURCE: "Buletin" izobrashcheniya i tovarnykh znakov, no. 5, 1969, 70

1. THE INVENTION

2. THE INVENTION
The present invention relates to a method for producing polyimide, a polymer having a high temperature resistance, which is obtained by the reaction of small quantities of maleic anhydride, in large quantities, with diamine, and also to a polymer with high thermal stability, the polyimide, obtained by the reaction of maleic anhydride.

3. THE INVENTION

4. THE INVENTION
The invention is based on the fact that the polyimide, obtained by the reaction of maleic anhydride and diamine, has a high thermal stability.

| | | | |
|--|---------------|--------------------------|---|
| L 22744-66 | EWT(m)/EWP(j) | IJP(c) | RH |
| ACC NR: | AP6006353 | (A) | SOURCE CODE: UR/0413/66/000/002/0093/0093 |
| AUTHOR: Kamenskiy, I. V.; Lapitskiy, V. A.; Ukhinov, V. A.; Lomov, Yu. M.; Itinskii, V. I. | | | |
| ORG: none | | | |
| TITLE: Modification of rubber. Class 39, No. 1780935 | | | |
| SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarayye znaki, no. 2, 1966, 93 | | | |
| TOPIC TAGS: rubber, furan resin, thermomechanical property, chemical resistant material | | | |
| ABSTRACT: This Author Certificate describes a method for modifying rubber by combining it with resins. To raise both the thermal and chemical resistance of the final product, the use of a resin of the furan series containing an ionic-type catalyst is suggested. The reaction mixture is subjected to thermal treatment at 80--200C. Organic sulfonic acids, metal chlorides and mineral acids are proposed for use as catalysts. | | | |
| SUB CODE: 11/ | | SUBM DATE: 23Jan63 | |
| Card 1/1 | | UDC: 678.046.7:547.724.1 | |

ITKES, B. M.

Penicillin - Therapeutic Use

Penicillin autohemotherapy of gonorrhoea. Vest. ven. i derm. No. 5, 1952.

9. Monthly List of Russian Accessions, Library of Congress, December 1953. Unclassified.

ITKES, G. N.

ITKES, G.N., kandidat meditsinskikh nauk (Pyatigorsk)

Balneotherapy of gastric and duodenal ulcers at mineral spring
resorts in the Caucasus. Klin. med. 32 no.4:59-64 Ap '54.
(MIRA 7:7)

1. Iz Pyatigorskogo sanatoriya №.30 VTBSPS (glavnnyy vrach
Ye.S.Kelina, konsul'tant G.N.Itkes)
(BALNEOLOGY, in various diseases,
"Caucasus mineral water in peptic ulcer")
(PEPTIC ULCER, therapy,
"balnoother. with Caucasus mineral water")

ITKES, Grigoriy Naumovich

[Treatment of gastric and duodenal ulcer at Caucasian mineral water health resorts] Lechenie bol'nykh iazvennoi bolesn'i u sheludka i 12-perstnoi kishki na kurortakh Kavkazskikh mineral'-nykh vod. Issd.2., dop. Stavropol', Stavropol'skoe knizhnoe issd-vo, 1958. 75 p. (MIRA 13:4)

(PEPTIC ULCER) (CAUCASUS--MINERAL WATERS)

ITKES, G.N.; KHARCHENKO, L.I., red.; STEELYANKO, T.V., tekhn. red.

[Treatment of patients with peptic and duodenal ulcers at the
Caucasian Mineral Water Health Resorts] Lechenie bol'nykh
iazvennoi bolezniu zheludka i 12-perstnoi kishki na kurortakh
Kavkazskikh Mineral'nykh Vod. Izd. 3., dop. Stavropol',
Stavropol'skoe knizhnoe izd-vo, 1961. 76 p. (MIRA 16:6)
(CAUCASUS, NORTHERN--HEALTH RESORTS, WATERING PLACES, ETC.)
(PEPTIC ULCER)

VERTSMAN, G.Z., kand. tekhn. nauk; PANTELEYEV, P.I., kand. tekhn. nauk; GOMOLYAKO, I.M.; TAL', K.K.; GUSEVA, K.G.; LUGOVAY, P.A.; MASSAN, A.M.; GALKIN, N.V.; SAPKYGINA, G.M.; CHESNOKOV, D.S.; DROZDKOV, V.I.; IZYUMOV, P.S.; ZAK, B.O.; KOROGID, P.Ye.; MAKSIMOVICH, L.N.; ZBOROVSKAYA, M.I.; PAVLOVSKAYA, S.A.; BORISOV, A.V.; SELIVANETS, N.Ye.; ITKES V.M.; YATSKEVICH, Ya.D.; KOZYRSKIY, N.P.; NIKITIN, V.D.; NEKLEPAYEVA, Z.A., inzh., red.; MEDVEDEVA, M.A., tekhn.red.

[Design and planning of railroad stations and junctions]
Proektirovanie zheleznodorozhnykh stantsii i uzlov; spravochnoe i metodicheskoe proizvodstvo. Moskva, Transzheldor-izdat, 1963. 443 p.
(MIRA 16:12)

1. Nauchno-issledovatel'skiy institut transportnogo stroitel'stva (for Guseva). 2. Gosudarstvennyy institut tekhniko-ekonomiceskikh izyskanii i proektirovaniya zheleznodorozhного transporta (for Zak). 3. Kiyevskiy gosudarstvennyy proyektno-izyskateльskiy institut (for Kozyrskiy). 4. Moskovskiy institut inzhenerov zheleznodorozhnogo transporta Im. I.V. Stalina (for Nikitin).

(Railroad engineering)

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CIA-RDP86-00513R000618920007-8

BOGUSLAVSKIY, L.; ITKIN, A.

Economizers for apartment-house boiler units operating on gas.
Zhil-komm.khaz. 9 no.3:25-26 '59. (MIRA 12:5)
(Boilers)

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CIA-RDP86-00513R000618920007-8"

ITKIN, A.A.

KUZNETSOV, D.A.; ITKIN, A.A. [authors]; BASOV, M.I., kandidat tekhnicheskikh nauk
[reviewer].

"Repeated repair of a tool." D.A.Kuznetsov, A.A.Itkin. Reviewed by M.I.
BASOV. Art.trakt.prom. no.8:32-33 of cover Ag '53. (MLRA 6:8)

1. Orgavtoprom (for Basov). (Machine tools) (Kuznetsov, D.A.)
(Itkin, A.A.)

ITKIN, A. A., GUSMAN, S. M. and KARAMOV, K. S.

"Case of Defect in the Aortal Valves of Traumatic Origin" - p. 37

Voyenno Meditsinskiy Zhurnal, No. 10, 1962

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618920007-8

YAKOVLEV, S.V., doktor tekhn. nauk; KALITSUN, V.I., kand. tekhn. nauk;
ITKIN, A.L., inzh.

Sedimentation of waste waters in chambers. Vod. i san. tekhn.
no.1:12-14 Ja '66. (MIRA 19:1)

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618920007-8"

ITKIN, A.L.

KUZNETSOV, D.I.; ITKIN, A.L.; SOROKA, M.S., redaktor; RUDENSKIY, Ya.V.,
tekhnicheskiy redaktor

[Repeated reconditioning of tools and instruments] Mnogokratnoe
vosstanovlenie instrumenta. 2-e izd., ispr. i dop. Kiev, Gos.
nauchno-tekhn. izd-vo mashinostroit. lit-ry, Ukrainskoe otd-nie,
1955. 196 p.
(Tools) (Instruments)

(MIRA 8:8)

ITKIN, A.L., inzh.

Technical and economic factors involved in planning, assembly and
manufacture shops. Trakt. i sel'khozmash. no.5:42-45 My '59.
(MIRA 12:6)

(Agricultural machinery industry)

KUZNETSOV, Dmitriy Ivanovich; ITKIN, Abram L'vovich; DASHEVSKIY, I.I.,
retsenzent; CHISTYAKOVA, L.G., inzh., red.; GORNOSTAYPOL'SKAYA,
M.S., tekhn. red.

[Repeated reconditioning of metal-cutting tools] Mnogokratnnoe
vosstanovlenie instrumentov. Moskva, Gos. nauchno-tekhn. izd-vo
mashinostroit. lit-ry, 1961. 277 p.
(Metal-cutting tools)

ITKIN, Abram L'vovich; AFANAS'YEV, V.F., kand. tekhn. nauk, dota.,
retsenzent; CHISTYAKOVA, L.G., inzh., red.; GORNOSTAYPOL'SKAYA,
M.S., tekhn. red.

[Manufacture and use of hard-alloy metal-cutting tools] Izgotovlenie
i ekspluatatsiya tverdosplavnogo rezhushchego instrumenta. Moskva,
Mashgiz, 1962. 119 p.
(Metal-cutting tools)

ITKIN, A.L.; VOROBYEYCHIK, M.B.

Determining the economic expediency of the organization of tractor assembly plants. Trakt. i sel'khozmash. 33 no.12:34-35 D '63.
(MIRA 17:2)

1. Gosudarstvennyy institut po proyektirovaniyu traktornoy pro-myshlennosti i sel'skokhozyaystvennogo mashinostroyeniya.

MUKHOROV, Vladimir Il'ich, starshiy nauchnyy sotr.; ITKIN, Aron Mikhaylo-vich, starshiy zootehnik; KANDYBIN, M., red.; IVANOV, N., tekhn. red.

[Landrace swine] Svin'i landras. Kaluga, Kaluzhskoe knizhnoe izd-vo,
(MIRA 14:9)
1960. 48 p.

1. Sovkhoz "Kudinovo", Maloyaroslavetskogo rayona (for Itkin).
2. Kaluzhskaya sel'skokhozyaistvennaya opytnaya stantsiya (for
Mukhortov).
(Swine breeds)

ITKIN, D.A., inzh.

Quantitative evaluation of the reliability of electrical machines.
Vest. elektroprom. 34 no.8:79-80 Ag '63. (MIRA 16:9)
(Electric machinery industry--quality control)

YEL'TSOV, Sergey Grigor'yevich, prof.; ITKIN, B.Z., dots.; KHARCHENKO,
M.D., dots.; SOROKOVY, P.F., kand., veterinarnykh nauk.; SOLOVEY,
A.S., red.; ZUBRILINA, Z.P., tekhn. red.

[Operative surgery with the principles of the topographical
anatomy of domestic animals] Moskva, Izd-vo sel'khoz. lit-ry,
1958. 375 p. (MIRA 11:12)
(Veterinary surgery)

ITKIN, B.Z.; LIBERMAN, D.Kh., inzh., retezentsent; VAKHONIN, L.N., inzh., red.

[Potentials of improvement in the manufacture of beds] Rezervy
krovatnogo proizvodstva. Sverdlovsk, Tsentr.biuro tekhn.informatsii,
1959. 32 p.
(MIRA 14:4)

1. Russie (1917- R.S.F.S.R.) Sverdlovskiy ekonomicheskiy admi-
nistrativnyy rayon. Sovet narodnogo khozyaystva.
(Beds and bedsteads) (Metalwork)

ITKIN, B. Z.

27279

Dyechniye Ran "Tryefoni¹ Ovannoy" Syvorotkoy. Avtoryefyerat. Vyetyeinariya, 1949,
No 9, S. 38-41.

SO: LETOPIS NO. 34

YERSHOV, V.S., prof., doktor veter.nauk; ZHURAVEL', A.A., prof., doktor veter.nauk; PREOBRAZHENSKIY, N.M., dotsent, kand.veter.nauk; YEL'TSOV, S.G., prof., doktor veter.nauk; ITKIN, B.Z., dotsent; NOSKOV, N.M., dotsent, kand.veter.nauk; YEMEL'YANOVA, N.I., red.; RALLOD, A.I., tekhn.red.

[Principles of veterinary medicine] Osnovy veterinarii. Izd.2..
ispr. i dop. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1960. 437 p.
(MIRA 13:10)

1. Direktor Vsesoyuznogo instituta gel'mintologii im. K.I.Skryabin (for Yershov). 2. Zaveduyushchiy kafedroy fiziologii Lenigradskogo veterinarnogo instituta (for Zhuravel'). 3. Moskovskaya veterinarnaya akademiya (for Preobrazhenskiy). 4. Zaveduyushchiy kafedroy operativnoy khirurgii Moskovskoy veterinarnoy akademii (for Yel'tsov). 5. Zaveduyushchiy kafedroy epizootologii Orenburgskogo sel'skokhozyaystvennogo instituta (for Noskov).

(Veterinary medicine)

ITKIN, B.Z., dotsent

Methods for continuous taking of lymph from domestic animals.
Veterinariia 38 no. 7:71-74 Jl '61. (MIRA 16:8)

1. Moskovskaya veterinarnaya akademiya.
(Lymph)

~~ITKIN, I.A., inzh. (Krasnodar)~~

Assembling sanitary equipment of three-dimension elements in
apartment houses. Vod. i san. tekhn. no.1:23-25 Ja '66.
(MIRA 19:1)

ITKIN, I.M.

ANDREYEV, A.B.; ANTONOV, A.I.; ARAPOV, P.P.; BAIRNASH, A.I.; BEDNYAKOVA, A.B.; BENIN, G.S.; BERESNEVICH, V.V.; BERNSTEIN, S.A.; BITUTSKOV, V.I.; BLYUMENBERG, V.V.; BONCH-BLUYEVICH, M.D.; BORMOTOV, A.D.; BULGAKOV, N.I.; VEKSLER, B.A.; GAVRILENKO, I.V.; GENDLER, Ye.S., [deceased]; GERLIVANOV, N.A., [deceased]; GIBSHMAN, Ye.Ye.; GOLDOVSKIY, Ye.M.; GORBUNOV, P.P.; GORYALOV, F.A.; GRIMBERG, B.G.; GHYUNER, V.S.; DANOVSKIY, N.F.; DZEVUL'SKIY, V.M., [deceased]; DREMAYLO, P.G.; DYBITS, S.G.; D'YACHENKO, P.F.; DYURMBAUM, N.S., [deceased]; YEGORCHENKO, B.F., [deceased]; YEL'YASHKEVICH, S.A.; ZHEREBOV, L.P.; ZAVEL'SKIY, F.S.; IVANOVSKIY, S.R.; ITKIN, I.M.; KAZHDAN, A.Ya.; KAZHINSKIY, B.B.; KAPLINSKIY, S.V.; KASATKIN, T.S.; KATSUROV, I.M.; KITAYGORODSKIY, I.I.; KOLESNIKOV, I.F.; KOLOSOV, V.A.; KOMAROV, N.S.; KOTOV, B.I.; LINDE, V.V.; LEBEDEV, H.V.; LEVITSKIY, N.I.; LOKSHIN, Ya.Yu.; LUFTSAU, V.K.; MANNERBERGER, A.A.; MIKHAYLOV, V.A.; MIKHAYLOV, N.M.; MURAV'YEV, I.M.; NYDEL'MAN, G.E.; PAVLYSHKOV, L.S.; POLUYANOV, V.A.; POLYAKOV, Ye.S.; POPOV, V.V.; POPOV, N.I.; RAKHLEN, I.Ye.; RZHEVSKIY, V.V.; ROZENBERG, G.V.; ROZENTRETER, B.A.; ROKOTIAN, Ye.S.; RUKAVISHNIKOV, V.I.; HUTOVSKIY, B.N. [deceased]; HVVKIN, P.M.; SMIRNOV, A.P.; STEPANOV, G.Yu.; STEPANOV, Yu.A.; TARASOV, L.Ya.; TOKAREV, L.I.; USPASSKIY, P.P.; FEDOROV, A.V.; FERE, N.E.; FRENKEL', M.Z.; KHMYFETS, S.Ya.; KHLOPIN, M.I.; KHODOT, V.V.; SHAMSHUR, V.I.; SHAPIRO, A.Ye.; SHATSOV, N.I.; SHISHKINA, N.N.; SHOR, E.R.; SHPICHENETSKIY, Ye.S.; SHPRINK, B.E.; SHTERLING, S.Z.; SHUTYY, L.R.; SHUKHGAN'TER, L. Ya.; SHVAYS, A.V.;

(Continued on next card)

ANDREYEV, A.B. (continued) Card 2.

YAKOVLEV, A.V.; ANDREYEV, Ye.S., retsenzent, redaktor; BEMMEL,
GEYM, B.M., retsenzent, redaktor; BEMMAN, L.D., retsenzent, redaktor;
BOLTINSKIY, V.N., retsenzent, redaktor; BONCH-BRUYNVICH, V.L.,
retsenzent, redaktor; VELLER, M.A., retsenzent, redaktor; VINOGRADOV,
A.V., retsenzent, redaktor; GUDTSOV, N.T., retsenzent, redaktor;
DEGTYAREV, I.L., retsenzent, redaktor; DEM'YANYUK, F.S., retsenzent;
redaktor; DOBROSMYSLOV, I.N., retsenzent, redaktor; YELANGHIK, G.M.
retsenzent, redaktor; ZHEMOCHKIN, D.N., retsenzent, redaktor;
SHURAVCHENKO, A.N., retsenzent, redaktor; ZLODREYEV, G.A., retsenzent,
redaktor; KAPLUNOV, R.P., retsenzent, redaktor; KUSAKOV, M.M.,
retsenzent, redaktor; LEWINSON, L.Ye., [deceased] retsenzent, redaktor;
MALOV, N.N., retsenzent, redaktor; MARKUS, V.A. retsenzent, redaktor;
METELITSYN, I.I., retsenzent, redaktor; MIKHAYLOV, S.M., retsenzent;
redaktor; OLIVETSKIY, B.A., retsenzent, redaktor; PAVLOV, B.A.,
retsenzent, redaktor; PANYUKOV, M.P., retsenzent, redaktor; PLAKSIN,
I.N., retsenzent, redaktor; RAKOV, K.A. retsenzent, redaktor;
REZHAVINSKIY, V.V., retsenzent, redaktor; RINBERG, A.M., retsenzent;
redaktor; ROGOVIN, N. Ye., retsenzent, redaktor; RUDENKO, K.G.,
retsenzent, redaktor; RUTOVSKIY, B.N., [deceased] retsenzent,
redaktor; RYZHOV, P.A., retsenzent, redaktor; SANDOMIRSKIY, V.B.,
retsenzent, redaktor; SKRAMTAYEV, B.G., retsenzent, redaktor;
SOKOV, V.S., retsenzent, redaktor; SOKOLOV, N.S., retsenzent,
redaktor; SPIVAKOVSKIY, A.O., retsenzent, redaktor; STRAMENTOV, A.Ye.,
retsenzent, redaktor; STRELETSKIY, N.S., retsenzent, redaktor;

(Continued on next card)

ANDREYEV, A.V., (continued) Card 3.

TRET'YAKOV, A.P., retsenzent, redaktor; FAYERMAN, Ye.M., retsenzent,
redaktor; KHACHATYROV, T.S., retsenzent, redaktor; CHERNOV, H.V.,
retsenzent, redaktor; SHURGIN, A.P., retsenzent, redaktor; SHESTO-
PAL, V.M., retsenzent, redaktor; SHESHKO, Ye.F., retsenzent, redaktor;
SHCHAPOV, N.M., retsenzent, redaktor; YAKOBSON, M.O., retsenzent,
redaktor; STEPANOV, Yu.A., Professor, redaktor; DEM'YANYUK, P.S.,
professor, redaktor; ZNAMENSKIY, A.A., inzhener, redaktor; PLAKSIN,
I.N., redaktor; RUTOVSKIY, B.N. [deceased] doktor khimicheskikh nauk,
professor, redaktor; SHUKHGAL'TER, L. Ya, kandidat tekhnicheskikh
nauk, dotsent, redaktor; BRESTINA, B.S., redaktor; ZNAMENSKIY, A.A.,
redaktor.

(Continued on next card)

ANDREYEV, A.V. (continued) Card 4.

[Concise polytechnical dictionary] Kratkii politekhnicheskii
slovar'. Redaktsionnyi sovet: IU.A.Stepanov i dr. Moskva, Gos.
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1. Chlen-korrespondent AN SSSR (for Plaksin)
(Technology--Dictionaries)

ITKIN, I.M.

VOYTASHEVSKIY, D.A., kandidat tekhnicheskikh nauk; RUDNEV, S.S., kandidat
tekhnicheskikh nauk, redaktor; ITKIN, I.M., inzhener, zaveduyushchiy
redakteiyey; MODEL', B.I., tekhnicheskiy redaktor; TIEHONOV, A.Ya.,
tekhnicheskiy redaktor.

[Calculation and investigation of hydraulic turbine cascades]
Raschety i issledovaniia gidrodinamicheskikh reshetok. Gos. nauchno-
tekhnicheskoe izdatel'stvo mashinostroitel'noi lit-ry, Moskva, 1953.
86 p. (Vsesoyuznyi nauchno-issledovatel'skii institut gidromashino-
stroeniia. Trudy, no.16).
(Hydraulic turbines)

KATSENELENBAUM, Zakhariy Solomonovich, prof.; YAKOVLEV, A.I., inzh.,
retsenzent; ITKIN, I.M., inzh., red.; SALYANSKIY, A.A.,
tekhn.red.

[Fixed and working capital of the machinery manufacturing
industry] Osnovnye i oborotnye sredstva v mashinostroenii.
Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry,
1958. 174 p. (MIRA 12:1)

(Machinery industry)

DANILEVSKIY, Vladimir Viktorovich; ITKIN, I.M., nauchnyy red.; LITVAK,
D.S., red.; RAKOV, S.I., tekhn.red.

[Reference book for the young mechanical engineer] Spravochnik
molodogo tekhnologa-mashinostroiteelia. Moskva, Vses. uchebno-
pedagog. izd-vo Trudrezervisdat, 1958. 414 p. (MIRA 12:3)
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ITKIN, I.M.

Using abrasive bands. Mashinostroitel' no.4:42-43 Ap '62.
(MIRA 15:5)
(Abrasive wheels)

TAGIROV, Salikh Mikhaylovich; CHERNYAGIN, B.M., kand.tekhn.nauk,
retsenzent; ITKIN, I.M., inzh., red.; AKIMOVA, A.G., red.
izd-va; CHERNOVA, Z.I., tekhn.red.

[Construction and assembling of watches] Konstruktsiya i
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nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 243 p.
(MIRA 13:11)
(Clockmaking and watchmaking)

DANILEVSKIY, Vladimir Viktorovich; ITKIN, I.M., nauchnyy red.;
LITVAK, D.S., red.; TOKER, A.M., tekhn. red.

[Handbook for young technologists and mechanical engineers]
Spravochnik molodogo tekhnologa-mashinostroitelia. Izd.2.,
ispr. Moskva, Vses. uchebno-pedagog. izd-vo Proftekhnizdat,
1960. 414 p.
(MIRA 15:4)
(Mechanical engineering)

ITKIN, I.M.

Polishing machines and attachments. Mashinostroitel' no.5:44-45
My '62. (MIRA 15:5)
(Grinding machines)

ZAKHARENKO, Nikolay Nikolayevich; ITKIN, Lev Mendeleyevich;
KRISHTAL', L.I., red.

[Ways to increase labor productivity in railroad
transportation] Puti povyshenija proizvoditel'nosti
truda v khoziaistve dvizhenija. Moskva, Transport,
1964. 151 p. (MIRA 17:12)

BRONSHTEYN, Ye.I.; ITKIN, L.Ye.

Unstable complete atrioventricular block accompanied by frequent Adams-Stokes attacks. Zdravookh'aneniye 6 no. 2852-54 Mr-ap'63.
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1. Iz 2-oy gorodskoy bol'notsy g. Bel'tsy (glavnnyy vrach
I.N.Sarukhanova).

ITKIN, M. E., Engineer

USSR

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Tipped Tools," Stanki i Instrument,
10, Nos. 10-11, 1939.

Report U-1505, 4 Oct 1951

ITKIN, M.E.

Investigating cutting speed and capacity in milling EI-395 heat-resistant steel and EI-437 (KhN 80T) heat resistant alloy. Trudy KAI 26:104-130 '52.

(MLRA 10:6)

(Metal cutting)

ITKIN, M.B.

Investigating the temperature of carbon steel and Duralumin
workpieces machined on lathes. Trudy KAI 26:131-144 '52.
(Duralumin) (Steel) (Metal cutting) (MLRA 10:6)

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618920007-8

ITKIN, M.E.

Cold hardening of machined surfaces in milling BI-437 heat-resistant
alloys. Trudy KAI 28:141-166 '54. (MLRA 10:6)
(Heat-resistant alloys) (Metal cutting)

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618920007-8"

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618920007-8

ITKIN, M.E.

Universal chip breakers. Trudy KAI 28:167-183 '54.
(Machine tools--Attachments)

(MLRA 10:6)

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618920007-8"

ITKIN, M.E.

Investigating the depth of cold hardening and stresses in surface
layers of BI-437 heat-resistant alloys in noncircular machining.
Trudy KAI 30:161-181 '55. (MLRA 10:6)
(Heat-resistant alloys) (Metal cutting)

ITKIN, M.E.

Chip formation and physical phenomena occurring in machining
ferrous metals and light-weight alloys on lathes. Trudy KAI 31:169-202
'56. (MLRA 10:5)

(Metal cutting) (Lathes)

SOV/117-58-12-22/36

AUTHORS: Itkin, M.E., Candidate of Technical Sciences, Kupidonov, S.S.,
Engineer

TITLE: The Machining of High-Strength Materials with Mineral-Ceramic
Cutters (Obrabotka vysokoprochnykh materialov mineralokera-
micheskimi reztsami)

PERIODICAL: Mashinostroitel', 1958, Nr 12, pp 29-31 (USSR)

ABSTRACT: Experiments were carried out on finishing "30KhGSNA" steel
with a mineral-ceramic cutter. It was stated that minimum
wear of the cutter was obtained by applying the following
optimum geometry of the instrument: face angle - 0°; chamfer
angle - 10°; chamfer dimension - 0.5 mm. The results obtained
in laboratory investigations were tested under industrial con-
ditions with different parameters. It was stated that the
cutting speed of ceramic cutters exceeds that of hard alloy
cutters by 50 %. The described instrument can be successfully
used for semi-rough and finishing lathe operations on "30KhGSNA"
grade steel tempered up to = 160 to 180 kg/sq mm. There are
2 graphs, 1 diagram, 1 table and 5 Soviet references.

Card 1/1

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S/123/60/000/05/01/009

Translation from: Referativnyy zhurnal, Mashinostroyeniye, 1960, No 5, p 94,
21471

AUTHOR: Itkin, M.E.

TITLE: Investigating the Cutting Process as a Process of Plastic Com-
pression

PERIODICAL: Tr. Kazansk. aviat. in-ta, 1958, Vol 38, pp 317 - 356

TEXT: The author describes investigations connected with the determination of plastic deformation during the free compression of standard specimens and compression-cutting of special specimens. The specimens employed were of the carbon steel grades 20⁸ and 45⁸, the chrome-nickel steel grades 5 A1 (5ZAl) and X1H (Kh1N), and D6 (D6) duralumin. The compression tests were carried out with the Gagarin-press and the IM-A4 (IM-A4) machine at a deformation rate of 1 mm/min. The author describes the practice of free compression of round and square specimens, of restricted compression by single-edge punches and of compression-cutting by multiple-edge punches. He presents

Card 1/2

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81471

S/123/60/000/05/01/009

Investigating the Cutting Process as a Process of Plastic Compression

photos of microsections and states the microhardness in the deformation zone for various kinds of compression. As a result of the tests it was found that 1) the mechanical metal characteristics $\sigma_{0.2}$ (yield limit) and σ_0 (conventional yield limit according to the polytropic curve of compression) depend to a great extent on the ratio of the height of a specimen to its diameter, 2) the stagnant metal zones affect the nature of plastic deformation during free compression, 3) cutting-compression with single-edge tools ensures a curvilinear characteristic of the shear surface, 4) the conventional yield limit and the specific compression-cutting strain decrease with an increase in thickness of the layer to be compressed, 5) it is impossible to use for the rating of cutting stresses the values σ_0 , obtained from the free compression tests of unrestricted specimens, 6) during the cutting process the greatest alterations in material structure take place in the zones of greatest deformation.

47 figures, 6 tables, 8 references.

B.L.D.

X

Card 2/2

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| <p>1957/1958</p> <p>1958/1959</p> <p>1959/1960</p> | <p>1960/1961</p> <p>1961/1962</p> <p>1962/1963</p> |
| <p>1957-1958 1958-1959 1959-1960 1960-1961 1961-1962 1962-1963</p> <p>1957-1958 1958-1959 1959-1960 1960-1961 1961-1962 1962-1963</p> <p>1957-1958 1958-1959 1959-1960 1960-1961 1961-1962 1962-1963</p> | <p>1957-1958 1958-1959 1959-1960 1960-1961 1961-1962 1962-1963</p> <p>1957-1958 1958-1959 1959-1960 1960-1961 1961-1962 1962-1963</p> <p>1957-1958 1958-1959 1959-1960 1960-1961 1961-1962 1962-1963</p> |

S/123/61/000/001/011/015
A005/A001

Translation from: Referativnyy zhurnal, Mashinostroyeniye, 1961, No. 1, p. 40,
1B342

AUTHOR: Itkin, M. E.

TITLE: An Investigation of the Temperature of the Work Piece at the Lathe
Processing of Carbon Steel and Duralumin

PERIODICAL: V sb.: "Teplovyye yavleniya pri obrabotke metallov rezaniyem".
Moscow, 1959, pp. 158-177, 10

TEXT: The author describes the method of measuring the temperature of hollow and compact work pieces of steels 20, 40, 45, and Duralumin A 1 (D1) by movable and fixed thermocouples of nichrome - constantan. It was stated by the investigations that a constant temperature is set up in the work piece after a definite processing time. The temperature constancy duration depends on the cutting conditions and the work piece sizes; with increasing speed and feed, weight and dimensions of the work piece, the temperature in the surface layers decreases, and increases with increasing cutting depth. Thermal treatment (annealing) of the processed material causes an increase in the temperature. The application of

Card 1/2

S/123/61/000/001/011/015
A005/A001

An Investigation of the Temperature of the Work Piece at the Lathe Processing of Carbon Steel and Duraluminum

lubricating cooling liquids decreases the temperature in the surface layers by about 2.5 times. All grades of carbon steel have the same temperature under equal other conditions. The nichrome-constantan thermocouple offers a reliable method for measuring the temperature, if the work piece wall thickness is not smaller than 0.4 mm. Formulae are presented which allow the calculation of the effect of speed and feed on the temperature of the surface layers of the work piece (at 0.4 mm thickness of the layer). - There are 2 figures, 13 graphs, 5 tables, 7 references.

I. Bernshteyn

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

S/123/61/000/014/020/045
A004/A101

AUTHOR: Itkin, M.E.

TITLE: Investigating the effect of the cutting conditions and tool geometry on the pitch of the chip elements and the duration of their origination

PERIODICAL: Referativnyy zhurnal. Mashinostroyeniye, no.14, 1961, 23, abstract 14B152 ("Tr. Kazansk. aviat. in-ta", 1960, no. 52, 3 - 12)

TEXT: The pitch of chip elements was investigated during the turning of carbon steels (grades 20 and 45), of the heat-resistant 3U-437 (EI-437) alloy and of the AIT(DIT) grade Duralium on a lathe at free and restricted cutting. During free cutting, ring-shaped beads were turned from round specimens with P18 (R18) tools and radial feed. The tests were carried out with varying cutting speed values within the range $V = 1.82 - 163 \text{ m/min}$ and at a constant depth of cut of $t = 2.5 \text{ mm}$. The author presents the dependence of the element pitch and the lamellar structure of the chips on feed S, rake angle of tool γ and V. It was found that the chip element pitch increases with a growing γ . With the increase of S the element pitch grows more intensively when ductile materials are

Card 1/2

Investigating the effect ...

S/123/61/000/014/020/045
A004/A101

machined (grade 20 and EI-437 steel) than during the working of less ductile 45 grade steel. If S is increased up to 0.3 mm/rev the lamellar structure pitch of the chip grows, remaining constant (0.04 mm) at $S > 0.3$ mm/rev. With an increase of V the dimensions of the pitch elements and lamellar structure decrease. By mathematical calculations and experimental data the author determines the quantity of chip elements being in simultaneous contact with the tool front edge, depending on the material being machined and the cutting speed. He presents the dependence of the duration of the origination of one chip element on the cutting speed and the material being worked. There are 12 figures and 4 references.

I. Bernshteyn

[Abstracter's note: Complete translation]

Card 2/2

S/123/61/000/015/018/032
A004/A101

AUTHOR: Itkin, M. E.

TITLE: Investigating the microhardness of chips and the cutting zone

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 15, 1961, 25, abstract
15B156 ("Tr. Kazansk. aviat. in-ta", 1960, no. 52, 13-26)

TEXT: The author presents the results of investigating the microhardness in the cutting zone and of the chips during the machining of the grades 20 and 45 steel, the heat-resisting 3Н-437 (EI-437) alloy and the А1Т (D1T) alloy. The distribution of microhardness over the chip element was determined during the restricted cutting of grade 20 steel by high-speed steel tools ($t = 2.5$ mm; $S = 0.6$ mm/rev and $V = 1.62$ and 3.36 m/min). It was found that the microhardness on the chip element surfaces (face end surface, chipping surface and chip element contact surface) decrease with the distance from the tool blade. The maximum hardening is found in that part of the element face end surface adjacent to the tool top where the hardness is the double of the initial material. The author presents curves of changes in the microhardness of the contact surface of unbroken chips which show that, at equal cutting parameters (S and V), the EI-347

Card 1/2

S/123/61/000/015/018/032
A004/A101

Investigating the microhardness ...

alloy acquires the maximum hardening, following by the steel grades 20 and 45 and the D1T alloy. The microhardness of the contact layers depends on the cutting speed which is explained by the effect of the deformation rate and cutting temperature in the contact zone on the nature of metal hardening. During the investigation of the effect of the cutting speed on the microhardness of the ferrite and pearlite of the chip contact surface over a depth of 0.08 mm during the free and restricted cutting of grade 45 steel, it was found that the hardness of the deformed pearlite is greater than that of the deformed ferrite and the hardness of the structural constituents during free cutting exceeds the hardness of the structural constituents during restricted cutting. With the growing distance from the boundary of the contact layer into the chip depth, the hardness of the deformed layer gradually decreases. There are 13 figures and 5 references.

I. Bernshteyn

[Abstracter's note: Complete translation]

Card 2/2

S/123/61/000/023/008/018
A052/A101

AUTHORS: Itkin, M. E., Kupidonov, S.S.

TITLE: Machining high-strength steels with knives tipped with ceramic-metal plates

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 23, 1961, 28-29,
abstract 23B215 (V sb. "Instrumental'n. rezhushchiye materialy".
Moscow, AN SSSR, 1960, 128-137)

TEXT: The turning of 30XГЧА (30KhGSNA) high-strength steel hardened to $\sigma_b = 160 - 180 \text{ kg/mm}^2$ with a ceramic-metal tool was investigated at the Kazan' Aviation Institute. Hollow cylinders turned on 25-kw Shiss-Defriz lathe were used as samples. 332 (Tsm332) plates had the following geometry: $\gamma = 0^\circ$; $\gamma = -10^\circ$; $\alpha = 12^\circ$; $\varphi = 45^\circ$; $\varphi_1 = 10^\circ - 15^\circ$; $\lambda = 0$; $r = 0.15-1.5 \text{ mm}$. The investigations have shown that ceramic-metal tools can be successfully used for semirough and finish turning; the wear of the knife when turning without cooling should not exceed 0.4 mm and when turning with cooling 0.55 mm, the feed should not exceed 0.4 mm/rev. A formula for computing cutting speeds is recommended. There are 3 references, 3 tables, 6 figures. L. Bozin
[Abstracter's note: Complete translation]

Card 1/1

L 19192-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD
ACCESSION NR: AR3004199

8/0276/63/000/005/B147/B147

59

SOURCE: RZh. Tekhnologiya mashinostroyeniya, Abs. 5B767

AUTHOR: Itkin, M. E.

TITLE: Investigation of cutting speed and hardening of machined surface at face and cylindrical milling of heat resistant and titanium alloys of brands EI437B, EI437A, EI617, and VT6.

CITED SOURCE: Sb. Ohrabaty*vayemost' zharoprochn. i titanovykh splavov. Kuyby*shev, 1962, 157-167

TOPIC TAGS: cutting speed, hardening, face milling, cylindrical milling, titanium, heat-resistant alloy, cutter type, EI437A, EI437B, EI617, VT6

TRANSLATION: Results are presented on investigation of face and cylindrical milling with high-speed R18 milling cutters of heat resistant alloys EI437A, EI437B and EI617, and of face-cylindrical milling of titanium VT6 alloy. This differed from regular cylindrical milling by a rounded angle on the milling cutter. Investigations were carried out using single-tooth cutters of miscellaneous construction -- face milling 130 mm diameter and cylindrical 82 mm with a spiral

Card 1/2

L 19192-63

ACCESSION NR: AR3004199

incline angle of 20°. At face and cylindrical milling of EI437A and EI617 alloys the cutter's wear took place along the rear face, reaching the greatest value (0.6 to 0.7 mm) at the top of the blade. Chipping of the cutter's blade occurred at machining of VT6 alloy. On the basis of the results of investigation an angle gamma equal 20° to 25° is recommended for facial and cylindrical milling of EI437, EI617 heat resistant alloys; at cylindrical milling of 437B -- gamma optimum equal 10°; for VT6 titanium alloy -- gamma optimum equal 5°. For all the heat resistant and titanium alloys an angle alpha equal 12 to 15° is recommended. The feed should not be less than 0.04 to 0.05 mm per tooth, in order to increase the tool durability and to decrease the degree of cold hardening when machining heat resistant alloys. Six figures, 4 tables and 3 references. E. Dyemova.

DATE ACQ: 21Jun63

SUB CODE: IE, MD

ENCL: 00

Card 2/2

S/145/62/000/011/003/003
D262/D308

AUTHOR: Itkin, M.E., Candidate of Technical Sciences,
Docent

TITLE: Investigation of temperature in the surface layer
of a product, depending upon relief angle during
turning of steel Cr.40 (St.40)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Mashinostroy-
eniye, no. 11, 1962, 193-198

TEXT: The moving cutter at the surface turning is assumed
as a moving linear source and the theory of movable sources by N.N.
Rykalin (Raschety teplovlykh protsessov pri svarke (Calculation of
thermal processes in welding) Mashgiz, 1951) is applied to deduce
the equation for the temperature field. The experimental results
confirm the calculated values and deviations do not exceed $\pm 2\%$.
There are 1 table and 3 figures.

ASSOCIATION: Kazanskiy aviationsionnyy institut (Kazan' Institute
of Aviation)
~~Ques 1/2~~

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618920007-8

ITKIN, M.E.

Investigating forces acting on the front and back edges of a
cutting tool. Trudy KAI no. 70:71-86 '62.

(MIRA 18:4)

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618920007-8"

L 00600-66 EWT(d)/EWT(1)/EWT(m)/EWP(v)/EWP(t)/EWP(k)/EWP(h)/EWP(b)/EWP(l) JD

ACCESSION NR: AR5018952

UR/0276/65/000/007/B089/B090
621.9.004.6.001.5

28
B

SOURCE: Ref. zh. Tekhnologiya mashinostroyeniya. Svodnyy tom, Abs. 7B719

AUTHOR: Itkin, M. E. 445

TITLE: Effect of physical parameters in cutting operations on tool wear

CITED SOURCE: Tr. Kazansk. aviat. in-ta, vyp. 84, 1964, 33-35
445

TOPIC TAGS: tool wear equation, cutting tool, relief angle effect, tool wear
445 1b 14

TRANSLATION: A formula is given for calculating wear on the trailing surface of a cutting tool. The equation indicates that wear on that surface is affected substantially by specific friction forces, by the cutting speed, the ratio of material to tool hardness, the geometric parameters of the cutting tool and the physical characteristics of the workpiece and tool. It is established that the relief angle produces a greater effect on tool wear than the back rake angle. Bibl. with 1 title. L. Romancheva

Card 1/2

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618920007-8

L 00600-66

ACCESSION NR: AR5018952

SUB CODE: IE

ENCL: 00

Card 2/2 *DP*

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618920007-8"

KERNES, I.Ya.; KOTEL'NIKOVA, L.A.; LEMAN, T.R.; SHTUTINA, A.M.;
KINKUL'KIN, A.T., retsenzent; KOLOSKOVA, P.P., retsenzent;
SEMENKOV, V.N., retsenzent; ITKIN, M.L., red.; MASONOV, Yu.I.,
red.; ZELENTSOVA, Ye.I., tekhn. red.

[Sociology; recommended list of literature for the aid of
the teacher] Obshchestvovedenie; rekomendatel'nyi ukazatel'
literatury v pomoshch' uchitelju. Moskva, Izd-vo Vsesoiuz-
noi knizhnoi palaty, 1963. 145 p. (MIRA 16:3)

1. Moscow. Gosudarstvennaya publichnaya istoricheskaya biblio-
lioteka. 2. Nauchno-bibliograficheskiy otdel Gosudarstvennoy
publichnoy istoricheskoy biblioteki (for Kernes, Kotelnikova,
Leman, Shtutina). 3. Zavedyushchiy sektorom obucheniya
istorii Instituta obshchego i politekhnicheskogo obrazovaniya
Akademii pedagogicheskikh nauk RSFSR (for Kinkul'kin). 4. Uchi-
tel' sredney shkoly No.204 Timiryazevskogo rayona Moskvy (for
Koloskova). 5. Starshiy inspektor Upravleniya prepodavaniya
obshchestvennykh nauk Ministerstva vysshego i srednego spe-
tsial'nogo obrazovaniya SSSR (for Semenkov).

(Bibliography—Sociology)

L 4095-66 ENT(1)/EWA(h)

ACC NR: AP5024985

SOURCE CODE: UI/0286/65/000/016/0046/0046

29
13

INVENTOR: Ivanitskiy, K. P.; Luk'yanov, A. N.; Itkin, N. I.

ORG: none

TITLE: Device for measuring the Q-factor of shf resonators. Class 21, No. 173810
(announced by State Committee on Radioelectronics SSSR (Gosudarstvennyy komitet po radioelektronike SSSR))

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 46

TOPIC TAGS: measuring instrument, resonator Q factor, resonator, superhigh frequency

ABSTRACT: This Author Certificate introduces a device for measuring the Q-factor of shf resonators. It consists of an FM generator, an AM detector, a switch, a comparison unit, a cathode-ray indicator, and a pointer-type indicator. In order to increase the measurement accuracy, the switch and the comparison unit are connected at their inputs with the resonator through a signal amplifier and with a reference voltage source. The cathode ray indicator is connected to the output of the switch, and the pointer-type indicator, to the output of the comparison unit. Orig. art. has: 1 figure.
[JR]

SUB CODE: EC/ SUBM DATE: 29Jun63/ ORIG REF: 000/ OTH REF: 000/ ATD PRESS: 4/29

PVK
Card 1/1

UDC: 621.317.337

L 13694-66 EWT(1)/EEC(k)-2/EWA(h)
ACC NR: AP6002875

SOURCE CODE: UR/0266/65/000/024/0037/0037

INVENTOR: Ivanitskiy, K. P.; Itkin, N. I.; Luk'yanov, A. N.

11
P

ORG: none

TITLE: Device for measuring ultrahigh Q factors. Class 21, No. 176961 [announced by the Establishment of the State Committee on Electronic Engineering SSSR (Predpriyatiye gosudarstvennogo komiteta po elektronnoy tekhnike SSSR)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 37

TOPIC TAGS: Q meters, rf resonator

ABSTRACT: The Author Certificate introduces a device for measuring ultrahigh Q's of rf resonators by reading the resonance time of a postimpact excitation. The device consists of an FM generator, a measuring resonator, a detector, a video amplifier, and a unit for separating the exponentially decaying part of a signal and measuring its duration. To exclude the effects of both frequency instabilities and FM generator output on measurements, an AM discriminator is employed. The input of the discriminator is coupled to the video amplifier output, while its output is coupled to a monovibrator generating negative pulses which are imposed on a sweeping sawtooth voltage in a summator. Orig. art. has: 1 figure. [JR]

SUB CODE: 091 SUBM DATE: 24Dec64/ ATD PRESS: 4187

141
Card 1/1 exp.

UDC: 621.317.737

ITKIN, S. I., Physician Cand. Med. Sci.

Dissertation: "The Condition of Histo-Hepatic Barriers." Second Moscow State Medical Inst., imeni I. V. Stalin, 2 Jun 47.

SO: Vechernaya Moskva, Jun, 1947 (Project #17836)

ITKIN, S.I.; DOGAYEVA, K.P.

Investigation on the morphology of the nervous system during life
according to Pavlev's theory. Vest. khir. 71 no.2:71 1951. (CDML 20:8)

ITKIN, S.I.

ITKIN, S.I., kandidat biologicheskikh nauk

Effect of a novocaine block on circulation and capillary
permeability in inflammation. Trudy AMN SSSR 24 no.2:130-
142 '53. (MLRA 7:7)

(INFLAMMATION, experimental,

*eff. of procaine nerve block on capillary permeability)

(PROCAINE effects,

*on capillary permeability in exper. inflamm.)

(CAPILLARY PERMEABILITY,

*eff. of procaine nerve block in exper. inflamm.)

ITKIN, S.I.

DOGAYEVA, K.Y., kandidat meditsinskikh nauk; ITKIN, S.I., kandidat
biologicheskikh nauk

In vivo studies on the morphology of the nervous system. Trudy
ANN SSSR 24 no.2:183-195 '53. (MLRA 7:7)
(NERVOUS SYSTEM, physiology,
*morphol., vital study)

ITKIN, S. I.
USSR/Medicine

FD-2260

Card 1/1 Pub 17-11/20

Author : Dogayeva, K. F.; Itkin, S. I.

Title : The effect of medicated sleep on blood circulation and capillary permeability of rabbits in scalds

Periodical : Byul. eksp. biol. i med. 3, 40-46, Mar 1955

Abstract : Investigated the effect of medicated sleep on blood circulation and capillary permeability in scalds of various degree and extent and established the limits of application of this method for the given ailment. Tables. One reference; USSR, since 1940.

Institution: Institute of Surgery imeni A. V. Vishnevskiy (Director-Prof. A. Vishnevskiy, Corresponding Member of the Academy of Medical Sciences USSR) of the Academy of Medical Sciences USSR

Submitted : March 29, 1954 by A. Ye. Braunshteyn, Member of the Academy of Medical Sciences USSR

ITKIN, S.I.

USSR / Pharmacology, Toxicology, Local Anesthetics

U-5

Abs Jour : Referat Zh.-Biol., No 1, 1958, 3446

Author : Itkin, S.I.

Inst. : Not given

Title : The Effects of Novocaine Block and Drug-induced Sleep on Capillary Permeability and Inflammation Caused by the Protein Fractions of Exudates

Orig Pub : Eksperim. khirurgiya, 1958, No 6, 40-47.

Abstract : In 144 experiments on 109 rabbits, an inflammatory process was produced with the aid of globulin fractions which had been separated from the inflammatory exudates of cats and dogs following the intrapleural instillation of turpentine, as well as from the postsurgical aseptic pleural exudates of patients. Capillary permeability was studied by microscopy during life using 1% solution

Card 1/3

ITKIN, S.I. (Moskva)

Reactive and structural changes in the autonomic nervous system in hypothermia. *Eksp.khir.* 4 no.2:53-55 Mr-Ap '59. (MIRA 12:5)

(AUTONOMIC NERVOUS SYSTEM, physiol.
eff. of hypothermia (Rus))
(HYPOTHERMIA, effects,
on autonomic NS (Rus))

ITKIN, S.I. (Moskva)

Intravital study of the morphology of the nervous system of the
internal organs in extensive burns. Kaz.med.zhur. no.5:114 8-0 '60.
(MIRA 13:11)

(VISCERA--INNERVATION)
(BURNS AND SCALDS)

SMOL'YANINOVA, N.S.; ITKIN, S.I.

Anatomic and functional changes in the gastrointestinal tract
following total or partial resection of the lung; experimental
study. Grud. khir. 2 no.3:73-74 My-Je '60. (MIRA 15:3)

1. Iz rentgenovskogo otdeleniya (zav. - prof. P.N. Mazayev)
Instituta khirurgii imeni A.V. Vishnevskogo (dir. - deystvitel'nyy
chlen AMN SSSR prof. A.A. Vishnevskiy) AMN SSSR. Adres avtorov:
Moskva, B. Serpukhovskaya ul., d.27, Institut khirurgii imeni
A.V. Vishnevskogo.

(ALIMENTARY CANAL) (LUNGS--SURGERY)

ITKIN, S.I.

Changes in the central nervous system in burns. Eksper, khir. 5
no. 3:60-61 My-Je '60. (MIRA 14:1)
(BURNS AND SCALDS) (NERVOUS SYSTEM)

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618920007-8

ITKIN, S.I. (Moskva)

Morphological changes in the central nervous system in burns.
Eksper. khir. i anest. 8 no.3:71-73 My-Je '63 (MIRA 17:1)

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618920007-8"

ITKIN, S.I.

Intravital morphological examination of the nervous system of
internal organs in extensive experimental burns. Ekspер. khir.
i anest. 9 no. 5:59-63 S-0 '64. (MIRA 18:11)

1. Otdel patologicheskoy anatomii (zav. - prof. D.S. Sarkisov)
Instituta khirurgii imeni A.V. Vishnevskogo (direktor -
deystviteльnyy chlen AMN SSSR prof. A.A. Vishnevskiy) AMN SSSR,
Moskva.

ITKIN, S. P.

"Effect of Novocain Block and Medicinal Sleep on Capillary Permeability in Inflammation Caused by the Protein Fraction of Exudates," by S. P. Itkin, Institute of Surgery imeni A. V. Vishnevskiy (head, Prof. A. A. Vishnevskiy, corresponding member, Academy of Medical Sciences USSR), Academy of Medical Sciences USSR, Eksperimental'naya Khirurgiya, No 6, Nov/Dec 56, pp 40-47

The relationship between the neuroceptors and the chemical factors of inflammation in the development of inflammation was studied. Protein fractions extracted from exudate were used for the experimental induction of the inflammatory process. It was shown that various protein fractions which were capable of increasing capillary permeability were also capable of causing tissue inflammation. However, the capacity of these globulin fractions for increasing capillary permeability is not always proportionate to their capacity for causing inflammation. Their capacity to produce inflammation is, however, always related to increased capillary permeability.

Novocain block and medicinal sleep greatly decrease the necrotizing action of necrosine (a proteinase of the trypsinase type) and the inflammatory action of the globulin fractions. Thus, the active of the action globulin fractions is dependent on the state of the nervous system. (U)

Sum-1391

BELKIN, B. A.; ITKIN, V. A.

Experimental study of a frequency multiplier using a pulsed
mode of self-oscillator operation. Elektrosviaz' 19
no. 10(75-77) 0 63.

1. Submitted Jan. 25, 1963.

(MTRA 10/12)

L 44451-66 EWT(m)/T/EWP(t)/ETI/EWP(k) IJP(c) JD/HW
ACC NR: AP6018946 (A) SOURCE CODE: UR/0126/66/021/006/0881/0886

AUTHORS: Itkin, V. P.; Mogutnov, B. M.; Shvartsman, L. A.

ORG: Institute for Study of Metals and Metal Physics. TsNIICHERMET imeni I. P. Bardin (Institut metallovedeniya i fiziki metallov. TsNIICHERMET)

TITLE: Effect of preliminary annealing and plastic deformation on the aging of martensite

SOURCE: Fizika metallov i metallovedeniye, v. 21, no. 6, 1966, 881-886

TOPIC TAGS: alloy steel, nickel containing alloy, aluminum containing alloy, martensite, metal aging

ABSTRACT: The effect of preliminary annealing and plastic deformation of iron-aluminum martensite on the aging and mechanical properties of the latter was investigated. The work supplements the results of an earlier study by V. P. Itkin, B. M. Mogutnov, and L. A. Shvartsman (DAN SSSR, 1965, 161, 1073); the experimental procedure employed is described by the same authors (FMM, 1966, 21, 732). The experimental results are presented graphically (see Fig. 1). It was found that aging of iron-aluminum martensite is a complex process accompanied by positive and negative heat effects. The alloy is strengthened by a high temperature aging, and the authors attribute this strengthening effect to precipitation of $(Ni, Fe)Al$. The authors thank G. V. Kurdyumov and M. D. Perkas for their valuable advice and critical appraisal of

Card 1/2

UDC: 548.53

L 44451-66

ACC NR: AP6018946

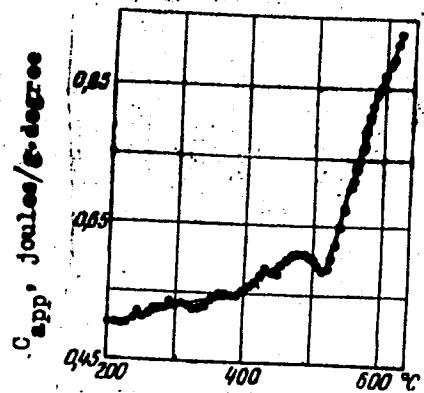


Fig. 1. Apparent heat capacity of slowly cooled alloy.

the experimental results. Orig. art. has: 3 graphs.

SUB CODE: 11/ SUBM DATE: 13Jul65/ ORIG REF: 005/ OTH REF: 002

Card 2/2 b

MIKHALEVICH, A.G.; ITKIN, V.P.

Continuous evaluation of sinter quality in the sintering machine
for the purpose of automatizing the sintering process. [Sbor.
trud.] TSNIICHM no.29:44-49 '63.

(MIRA 17:4)

L 49285-65 EWT(m)/EWP(z)/EWA (c)/EWP(b)/T/EWP(t)
ACCESSION NR: AFSC11520

Pad IJP(c) JU/SB
L7/CO26/65/164/205/10T3/1076

AUTHOR: Itkin, V. P.; Mogutnov, B. M.; Shvartsman, L. A.

TITLE: Heat transformations of iron-nickel martensite

SOURCE: AN SSSR. Doklady, v. 161, no. 5, 1965, 1073-1076

I 49295-5

ACCESSION NO.: ABS-11500

thermally. The aging of Fe-Ni-Al-Ti alloy was similar to that of the Fe-Al
alloy in that aging at temperatures below 400°C did not produce any
new phases.

1. The first step in the process of creating a new product is to identify a market need or opportunity.

NO REF Sov: 005

ENCL: 00 SUB CODE: MM
OTHER: 005 ATD PRESS: 400H

Caro

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000618920007-8"

L 36110-66 EWT(m)/EWP(w)/T/EWP(t)/ETI IJP(c) JD/HW/JH
 ACC NR: AP6017307 (N) SOURCE CODE: UR/0126/65/021/005/0732/0739

AUTHORS: Itkin, V. P.; Mogutnov, B. M.; Shvartsman, L. A.

ORG: Institute for Physical Metallurgy and Metal Physics (Institut metallovedeniya i fiziki metallov); TsNIIChERMET

TITLE: The nature of phases which separate during aging of iron--nickel--aluminum martensite

SOURCE: Fizika metallov i metallovedeniye, v. 21, no. 5, 1966, 732-739

TOPIC TAGS: martensite, iron containing alloy, nickel containing alloy, aluminum containing alloy

ABSTRACT: A thermodynamic calculation of the equilibrium composition of the products formed during the decomposition of aged Ni--Fe--Al martensite was carried out. The calculation supplements the data of V. P. Itkin, B. M. Mogutnov, and L. A. Shvartsman (DAN SSSR, 1965, 161, 1073) and is based on earlier literature data for activity coefficients for the binary systems Ni--Fe, Fe--Al and Ni--Al. The derivation of activity coefficients for the ternary system from the activity coefficients of the binary systems was carried out after the method of C. J. Wagner (Chem. Phys., 1951, 19, 5, 626)

$$\epsilon_{\text{Al}}^{\text{Ni}} = \epsilon_{\text{Ni}}^{\text{Al}} \approx \left[\frac{\partial \ln \gamma_{\text{Al}}}{\partial x_{\text{Al}}} \frac{\partial \ln \gamma_{\text{Ni}}}{\partial x_{\text{Ni}}} \right]^N,$$

Card 1/3

UDC: 548.53